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IMAGES IN CARDIOLOGY

Paradoxical Coronary Embolisms as a Presentation of Hereditary Hemorrhagic Telangiectasia

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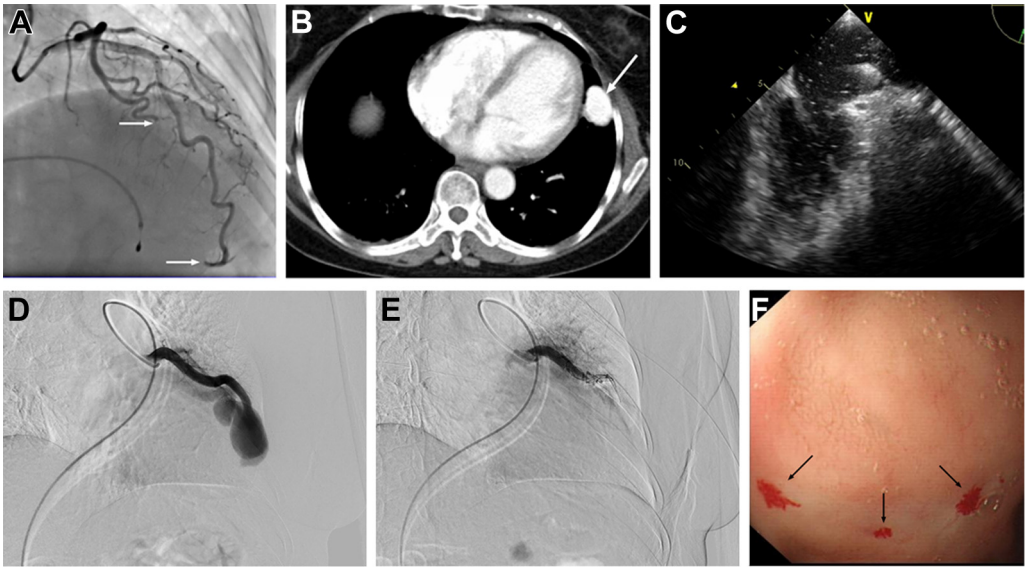

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A 63-year-old female presented with inferior myocardial infarction and persistent gastrointestinal bleeding. Coronary angiogram showed that distal segments of the left anterior descending and circumflex arteries were occluded (**A**, **arrows**; Online Video 1), suggesting coronary embolisms. Transesophageal echocardiography excluded left atrial or ventricular thrombosis, valvular vegetation, or patent foramen ovale. An enhanced chest computed tomography scan indicated an arteriovenous malformation in the left lung **(B**, **arrow)**. Contrast transesophageal echocardiography confirmed direct right-to-left shunting by showing microbubbles spraying from pulmonary veins to the left atrium (**C**; Online Videos 2 and 3). Pulmonary angiography revealed an arteriovenous malformation in the left lung, which was occluded by endovascular coiling (**D and E**; Online Videos 4 and 5).

Endoscopic examination for gastrointestinal bleeding revealed telangiectases in the stomach **(F)**. In addition, the patient had a history of severe epistaxis. Diagnosis of hereditary hemorrhagic telangiectasia was established, and we ultimately discovered a single base deletion (c.683delC p.S228WfsX7) of the endoglin gene in her family.